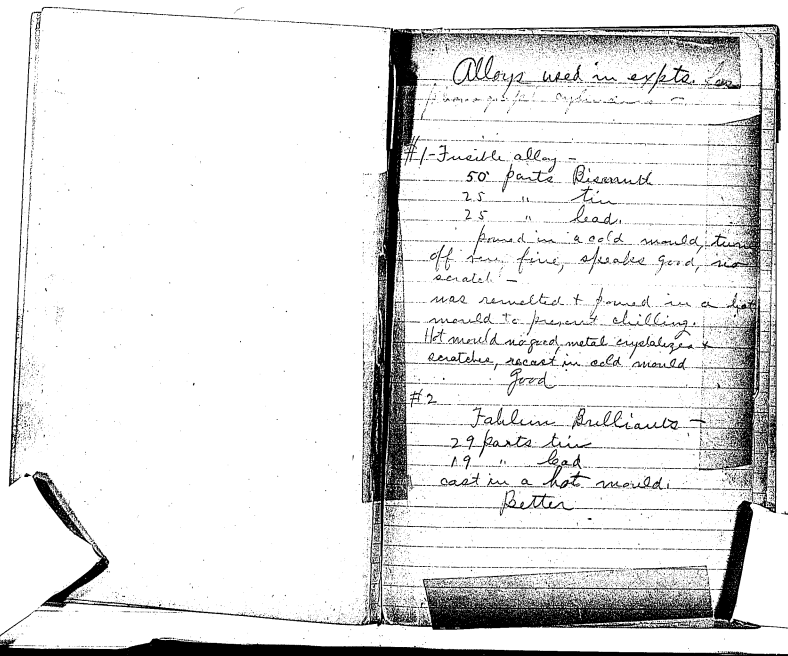
**Notebook, N-95-11-00**

The two dated entries in this notebook are from November and December 1895. The book was used by Edison, John Ott, and an unidentified experimenter for notes and drawings regarding phonograph cylinder experiments. Also included are various other drawings relating to the phonograph and the electric light. Near the end of the book are several lists in Edison's hand of chemical compounds, possibly pertaining to x-ray experiments. The pages are unnumbered. Approximately 25 pages have been used.



Alloys used in expts. on
[illegible]

#1- Fusible alloy -
50 parts Bismuth
25 " tin
25 " lead.
poured in a cold mould, turned off in fine, spirals good, no scratch -
was remelted & poured in a hot mould to prevent chilling.
Hot mould no good metal crystalizes & scratches, recast in cold mould
Good

#2
Fahlum Brilliants -
29 parts tin
19 " lead
cast in a hot mould.
Better

#3

Amalgam of Lipowitz's metal

Cadmium 3
tin 4
lead 8
Bismuth 15

after all is fluid + well mixed, add mercury 2, (the mercury should be heated to about 212° before adding + add hot)

This metal will not cast in moulds the mercury + heavy metals settle to the bottom.

Mercury heated until most of all the mercury was dissolved off, then recast in a cold mould. metal very hot.

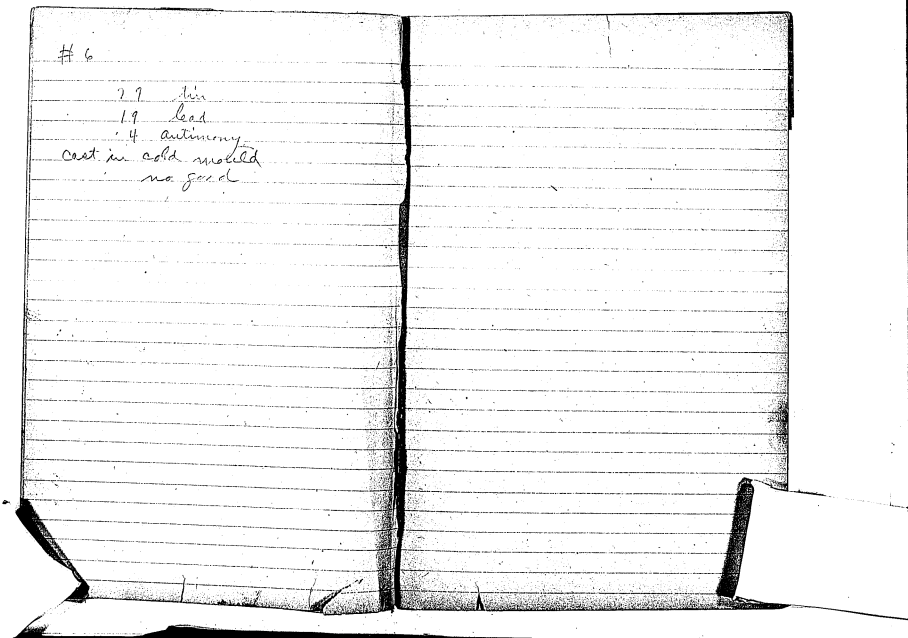
no good

#4

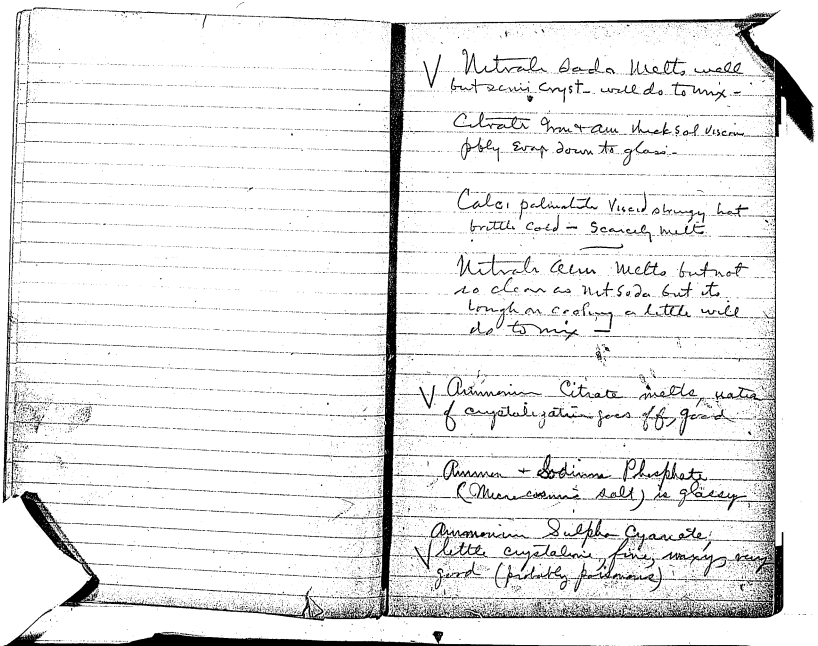
76 Parts Lead
24 " Antimony
cold moulds
no good

5-

24 tin
22 lead
6 antimony
cold moulds
no good


#6

2.9 tin
1.9 lead
.4 antimony
cast in cold molded
no good



V Nitrate Soda Melts well but semi cryst- will do to mix -

Citrate Iron + am Muck Sol viscous probly Evap down to glass -

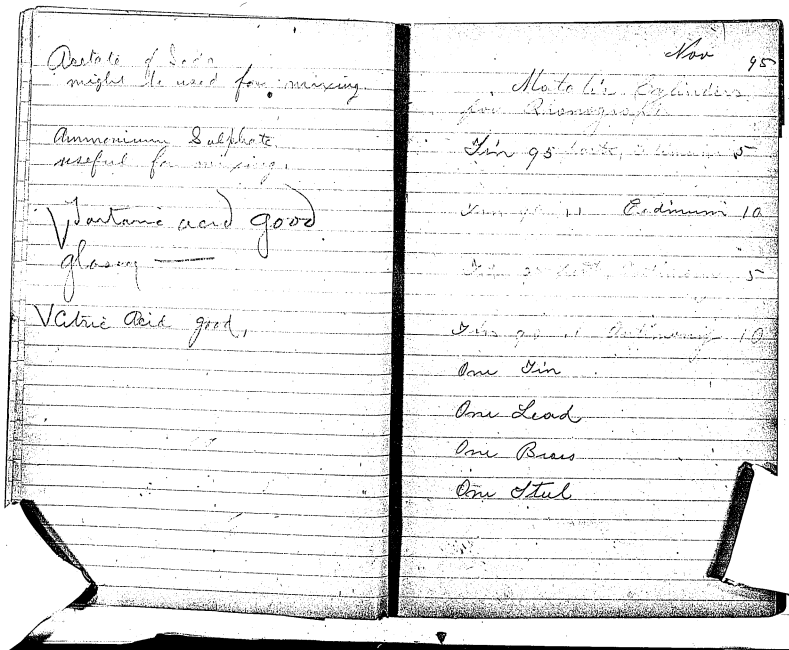
Calci palmate Viscid strungy hot brittle cold - Scarcely melt

Nitrate Alum Melts but not so clear as Nit Soda but its tough on cooling a little will do to mix

V Ammonium Citrate melts, ratio of crystallization poor if good

Ammon + Sodium Phosphate (Microcosmic salt) is glassy

V Ammonium Sulpho Cyanate; Melts crystalline fine, mixes very good (probably poisonous)



Acetate of Soda might be used for mixing

Ammonium Sulphate useful for mixing

Acetone and good glazing

Nitric Acid good

Nov 95

Metallic Cylinders for Ammonia

Tin 95 lbs. @ 5¢

Zinc 11 @ 10¢

Tin 95 lbs. @ 5¢

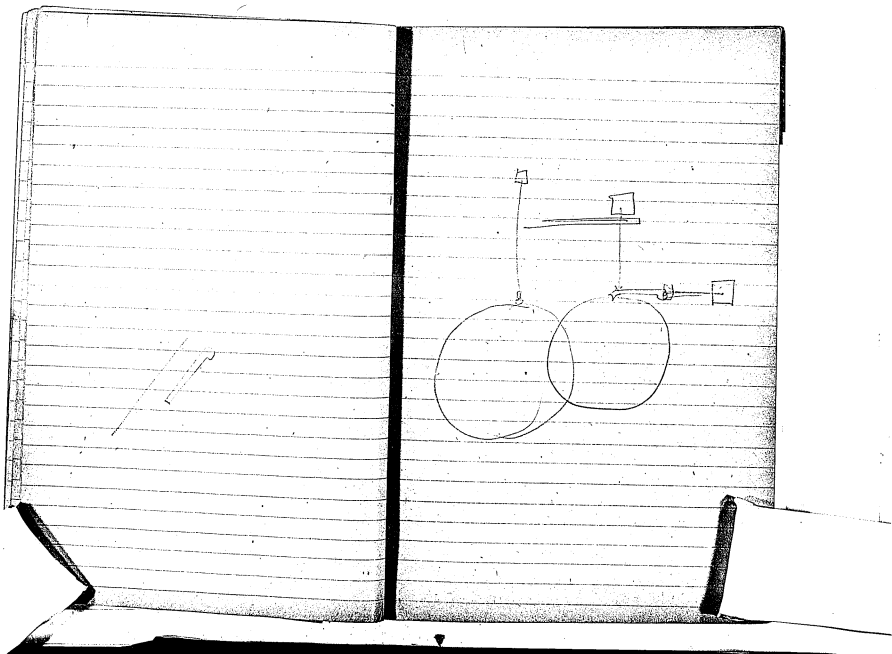
Zinc 11 @ 10¢

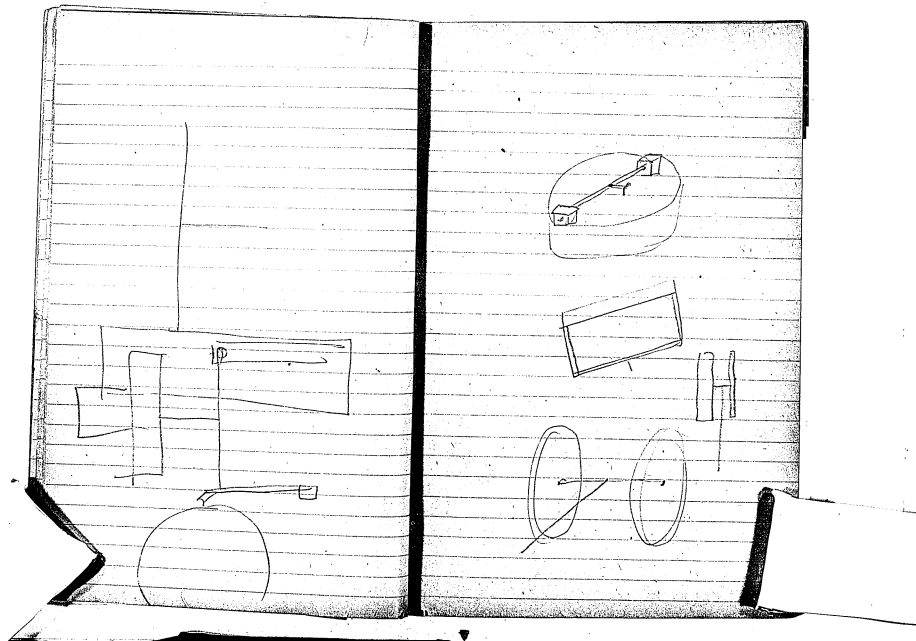
One Tin

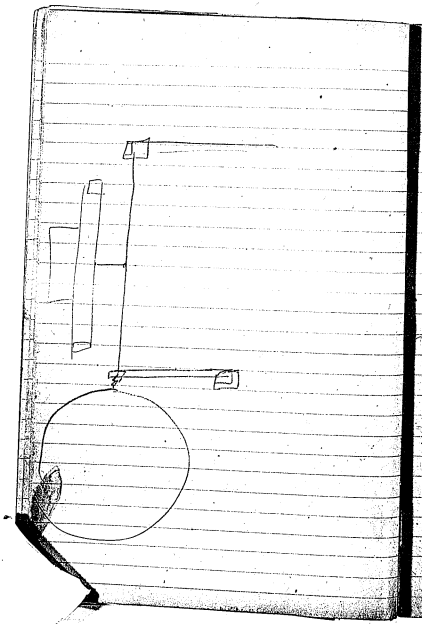
One Lead

One Brass

One Steel







J.S.Orm

Dec 1895

Alloys for Pneumatic Cylinders

Tichborne brilliant

| | | |
|---|---|---|
| Lead | 19 | 8 |
| Tin | 29 | 12 1/2 |

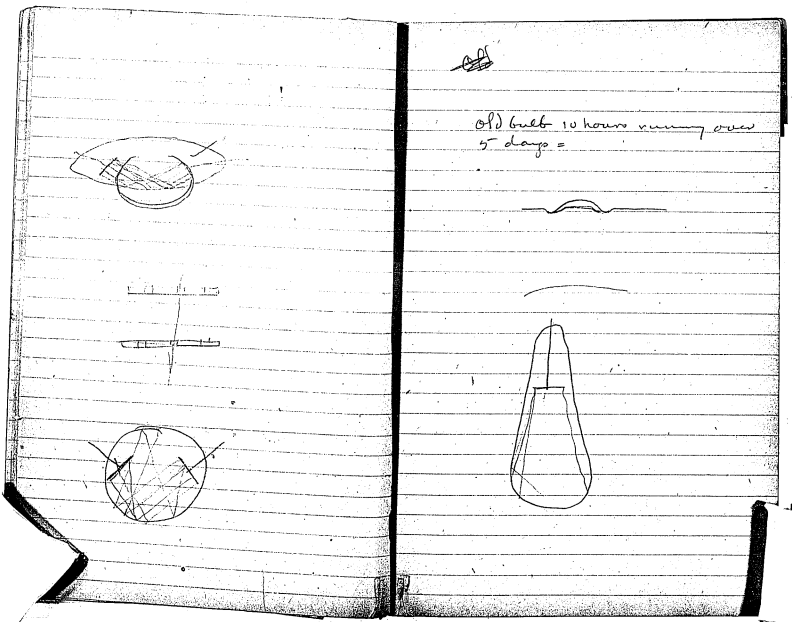
This turns very soft smooth and long fibrous

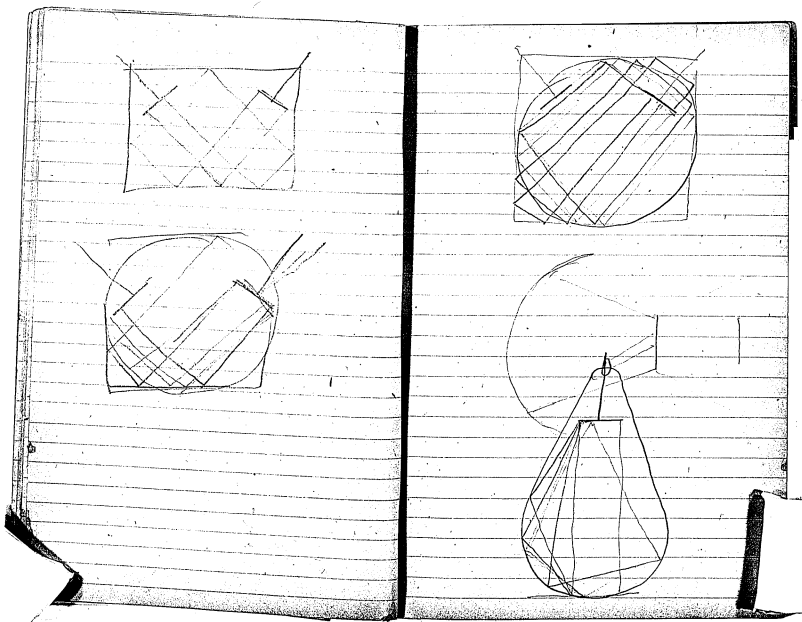
Looks grey clear and sharp

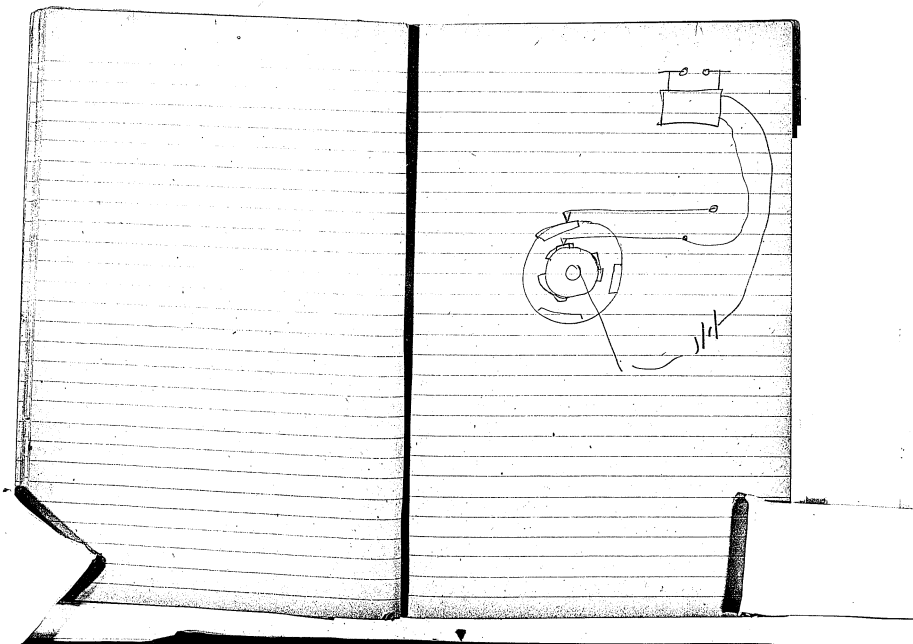
Expensive Alloy

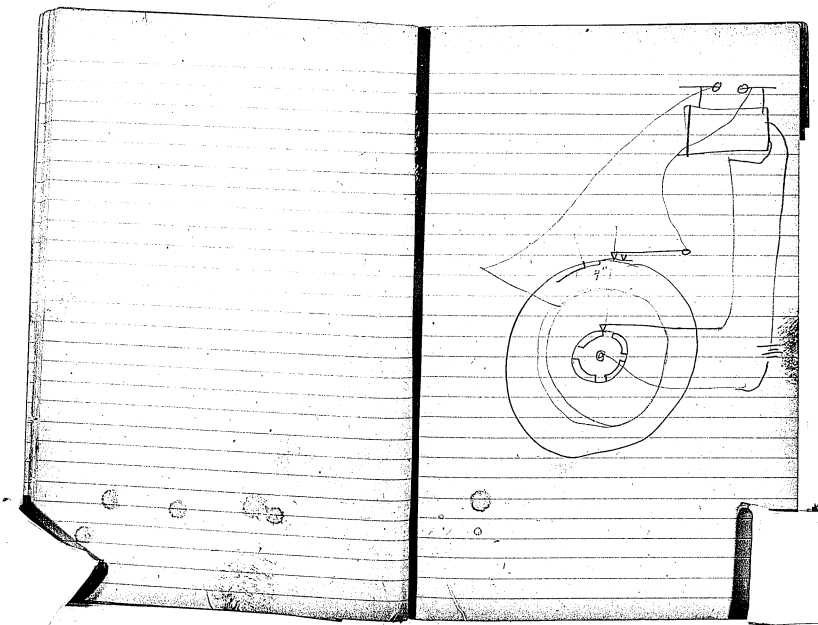
| | | |
|---|---|---|
| Cadmium | 3 | 1 |
| Tin | 4 | 1,33 |
| Bismuth | 15 | 5 |
| Lead | 8 | 2.66 |

This turns soft but short grained looks poor


old bulb 10 hours running over
5 days =



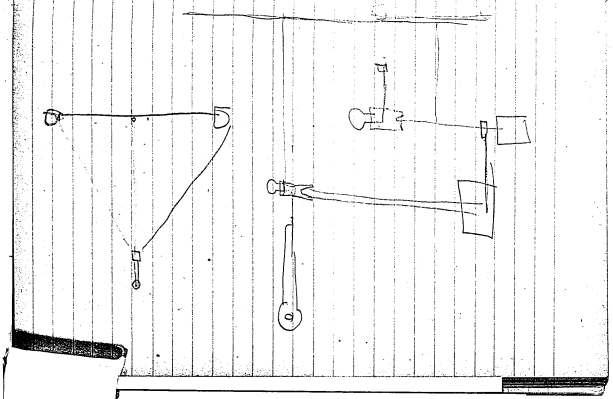


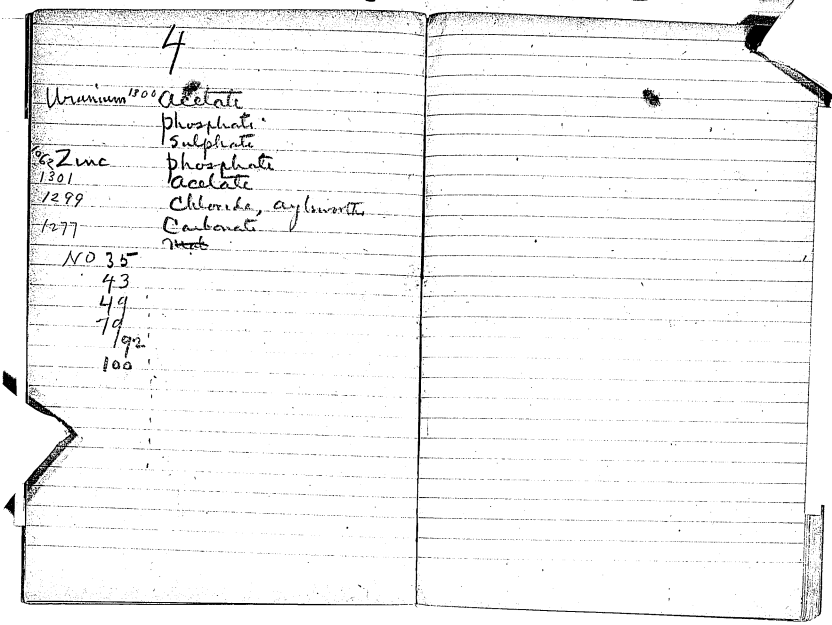


200

1500

350
900
1350
5000
350
7650
4
30600



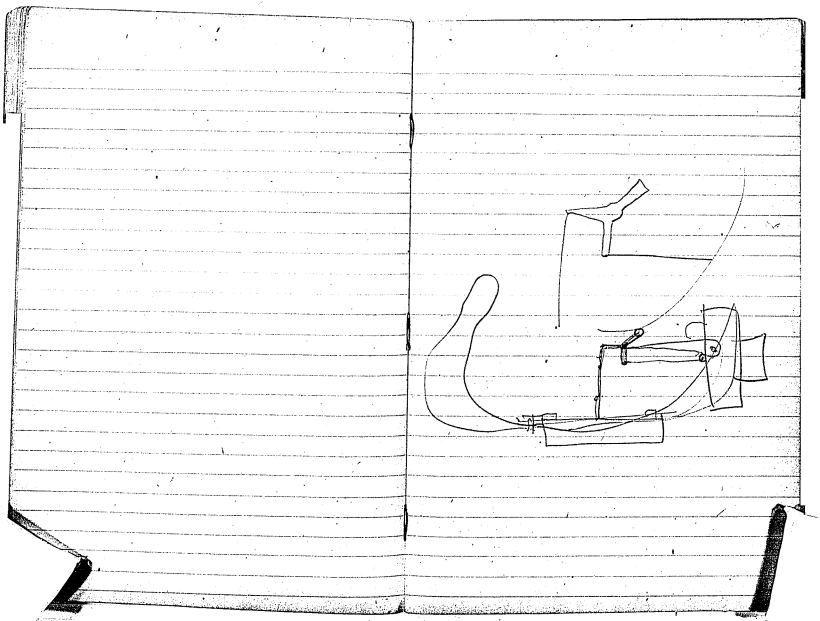
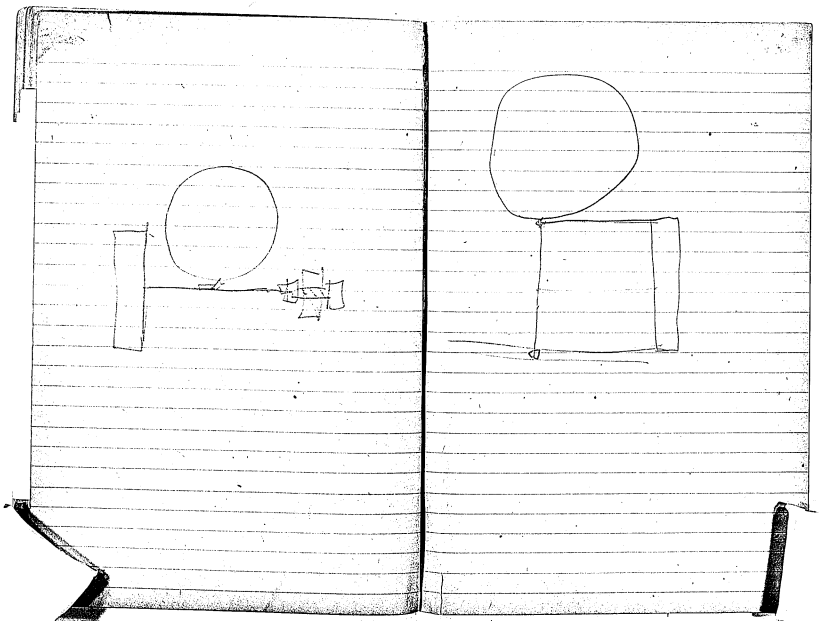

4
Uranium 1300 Acetate
phosphate
Sulphate
Zinc phosphate
1301 Oxalate
1299 Chloride, oxychloride
1277 Carbonate
NO 35
43
49
79
192
100

No 2

| | | |
|---|---|---|
| 1294 | Benzoate | Ammonium |
| 1298 | Fluoride | Barium |
| 1279 | Cadmium | Sulphati |
| 1292 | " | Bromide |
| 765 | " | Chloride |
| 1291 | " | Iodide ✓ Dup. No 1 |
| 1283 | " | Bromate " " " |
| 321 | Calcium | Salicylate |
| 259 | " | Sulfurrosum |
| | | Iodide |
| | | phosphate |
| 1278 | Iron | Dialised |
| 1282 | Iron | acetate Sesc |
| 1267 | Lithium | Bromide Liq. |
| | " | Benzoate |
| | Lead | Tannate |
| 335 | " | Iodide |
| 770 | Mang | Carbonate |

No 3

| | | |
|---|---|---|
| | Mercury | Bromide |
| 1286 | " | Subchloride |
| 1284 | Mercurous | Chloride |
| 1272 | Mercuric | Chloride |
| | Potassium | Salicylate |
| 578 | Silver | Chloride |
| | " | Carbonate |
| 199 | Sodium | Tartrate |
| 1116 | " | Cresotinide |
| 1051 | " | Salicylate |
| 1198 | | Fluoride |
| 1976 | | Bromide |
| 574-760 | | Carbonate |
| 813 | | Tartrate |
| 1113 | Strontium | Salicylate |
| 191 | " | acetate |
| 1297 | " | Chloride |
| | | ~~Tannate~~ |
| | " | Malyodate |

No. 1

| | |
|---|---|
| 65 | Pectolite |
| 107 | Calcite |
| 1260 | Lewisite-silver Diphenyl |
| 221 | Natrium Arsenicas |
| 576 | Lead Sulfphate |
| 140 | Ammon Salicylic |
| 436 | Cadmium Iodide |
| 531 | Tetra Meta Phosphate of Lead |
| 886 | Na Chloride (Common Salt) |
| 1103 | Cadmium Bromate |
| 8 | Fluorite |
| 1261 | Calcium Sulphostannate |
| 1263 | Bromide of Platinum |
| 1262 | Iodide of [illegible] |
| 1264 | Uranium Nitrate |
| 1290 | Lead Chloride |
| 1288 | Molybdic Acid |